

Acceptability of new generic blood tests for early tumour detection and development of an associated on-line peer-support programme (eCOPE)

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Why a blood test for Early Cancer Detection (ECD)?

UK rates of early cancer detection are lower than in many other western countries and survival remains relatively poor. At present early (pre-symptomatic) cancer detection is limited to cases identified through specific national screening programmes or via incidental radiological findings. Early tumour detection through a generic blood test could lead to earlier diagnosis, enhanced options for treatment by finding disease at an earlier stage and subsequent improved outcomes for patients.

Formation of The UK Early Cancer Detection Consortium

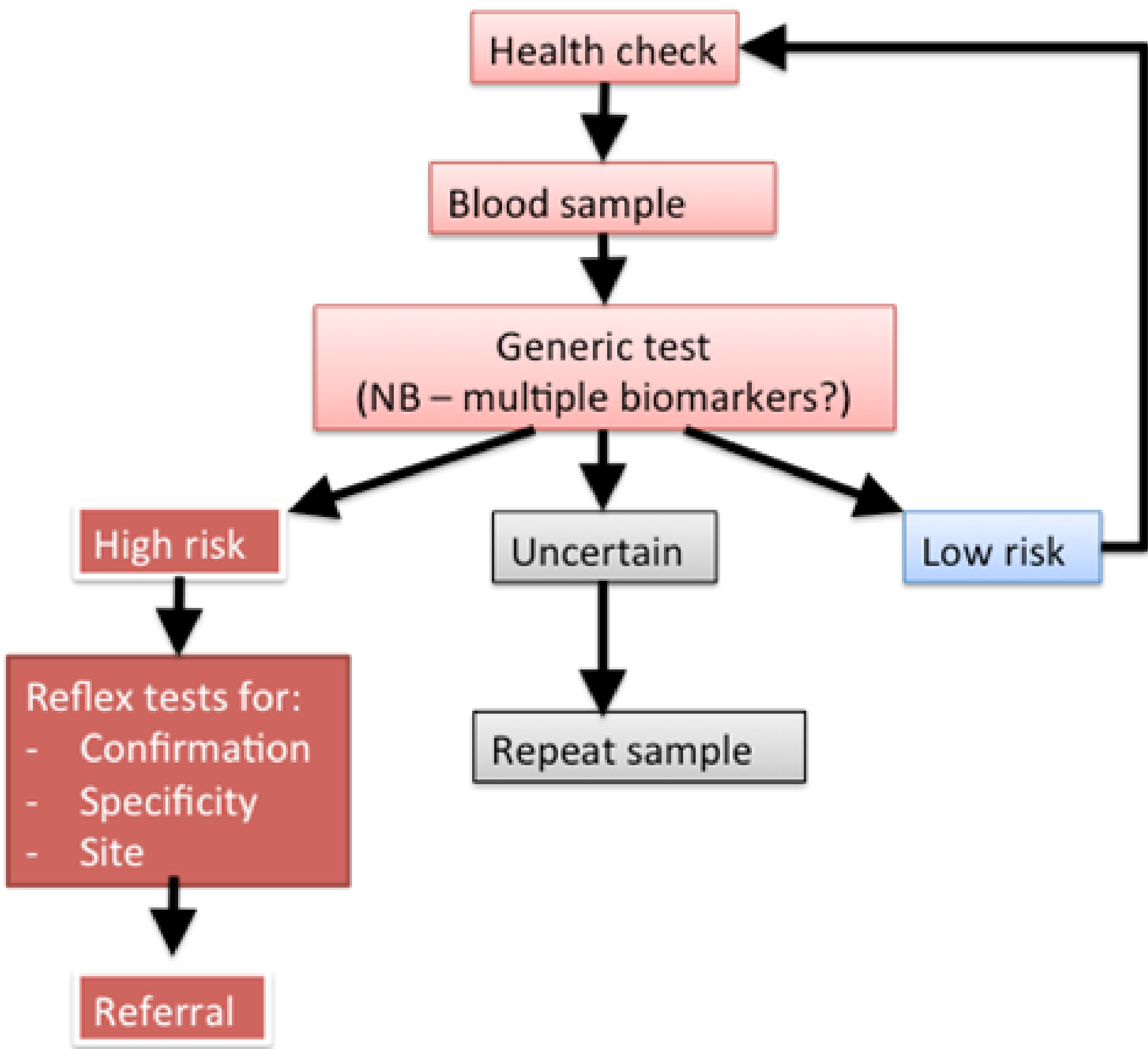
In 2012, fifteen UK universities and a number of commercial partners established an Early Cancer Detection (ECD) Consortium to identify, validate and implement new generic blood tests for early tumour (cancer) detection. In early 2014 the Consortium received funding from Cancer Research UK for workpackages 1 & 2 of the programme, to define and develop the underpinning evidence which the Consortiums long term programme is built upon. Today there are eighteen UK Universities, along with commercial partners working together within the consortium to develop a new generic blood test for the early detection of cancer (figure 1).

What the Consortium is doing? Underpinning Evidence

Work package 1 & 2 of the Consortium consists of a series of research activities to build the underpinning evidence for the long term programme and is currently ongoing:

- A rapid systematic review addressing what biomarkers exist that could be used to develop a general cancer screening assay from blood sampling (figure 2) and what is their state of development?
Prospero Registration CRD42014010827
- A rapid systematic review exploring and building the evidence base for acceptability in screening and early detection of cancer.
Prospero Registration CRD42014012941
- A National Delphi exercise of UK experts to identify what information decision-makers in the NHS may need at both a national policy level and a regional/local level prior to implementation of such a screening programme.
- Development of a draft economic model to underpin the development of a blood based early cancer detection programme.

Figure 2. Possible design for a generic blood based cancer screening/early detection test



What are the implications for patients?

Although the introduction of regular ECD blood tests should improve early detection across all cancer types, it will also extend significantly the population of patients who are identified as at risk and their support needs. **For patients waiting to receive a final diagnosis of cancer type/stage it will be a stressful experience, as will ongoing surveillance.**

The importance of psychological support is already recognised for people living with cancer. Studies to date indicate that information and support offered has the potential to influence wellbeing, future health behaviour (e.g. screening uptake), and coping with a final diagnosis. For large-scale ECD testing any psychological support offered to patients will need to be cost-effective, eCOPE may provide a cost-effective solution to this.

eCOPE - An online peer led self-management support tool

Building on an evidence based self-management support programme developed for survivors of cancer (HOPE), and grounded in positive psychological theory, a peer-support programme for ECD patients is being developed (eCOPE).

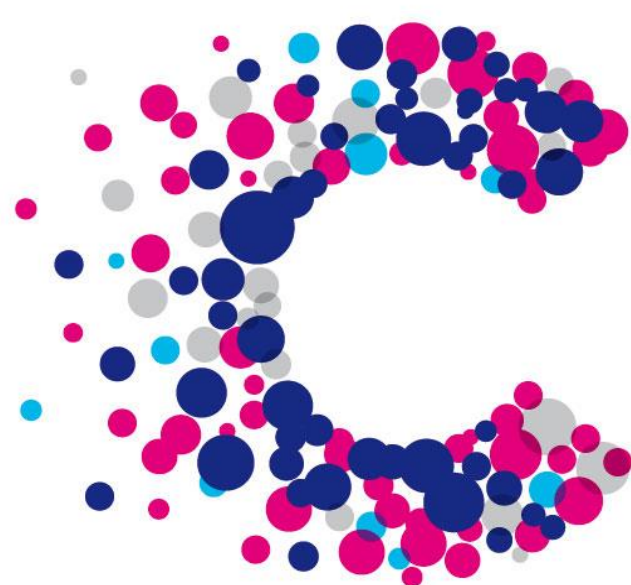
early Cancer Overcoming Problems Effectively

eCOPE incorporates online collection of outcomes and health/social care resource use data, enabling impact on patient wellbeing and costs to be recorded during the early diagnostic and monitoring phases. eCOPE development is based on structured psychological approaches, combined with co-creation, and co-delivery (e.g. peer and professional).

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